

**FINDING OF NO SIGNIFICANT IMPACT  
AND  
DECISION RECORD  
2001 Grazing Program for the  
South Fork Little Humboldt River Basin,  
Little Humboldt Allotment  
BLM/EK/PL2001/018**

**Finding of No Significant Impact**

Based on the analysis of Environmental Assessment BLM/EK/PL2001/018, I have determined that the proposed action will not have a significant effect on the human environment, and therefore, an environmental impact statement will not be prepared. Adherence to Standard Operational Procedures outlined in the proposed action of the Environmental Assessment will avoid or minimize potential harm to the affected environment.

**Decision**

It is my decision to authorize implementation of the 2001 grazing program for the South Fork Little Humboldt River basin, Little Humboldt Allotment, as described in the proposed action of BLM/EK/PL2001/018. Livestock grazing will be authorized in the South Basin pasture from April 1 through July 15, 2001, and in the North Basin pasture from September 15 through October 31. BLM will provide materials to the permittee to construct the “Blue” and “Hangnail” fences on public lands subject to the survey and design process and the necessary easements across private lands.

**Rationale**

The proposed action will benefit Lahontan cutthroat trout (*Oncorhynchus clarki henshawi*), a Federally threatened species, by reducing livestock damage to riparian/wetland vegetation associated with Lahontan cutthroat trout streams within the South Fork Little Humboldt River basin (basin), Little Humboldt Allotment. The proposed action would also benefit other sensitive species associated with the basin.

The proposed action, developed after consultation meetings with the U.S. Fish and Wildlife Service (FWS) and the permittee, Oro Vaca, Inc., provides a six week season of use in each of two proposed new pastures within the basin for the 2001 grazing season. The two new pastures would provide separate areas for cattle in the spring and fall periods, with livestock grazing elsewhere on the allotment from July 16 through September 14. More AUMs would be provided to the permittee with the proposed action than with the no action alternative.

Under the no action alternative, which would be implementation of the 2000 BLM grazing decision, riparian/wetland habitat condition would provide similar benefits as described in the FWS 2000 Biological Opinion, but riparian/wetland areas would improve more rapidly than with the proposed action since livestock would be out of the basin by June 30<sup>th</sup>, rather than July 15<sup>th</sup>. The no action alternative would retain one pasture within the basin which provides more grazing lands to use during the spring use period, but would not allow any fall grazing within the basin. The “Blue” fence would not be constructed with the no action alternative.

The proposed action is in conformance with the Elko RMP objectives to improve or maintain riparian/wetland resources. The proposed action would also comply with the Standards and Guidelines for the Northeastern Great Basin Resource Advisory Council (4180.2 (C)).

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Date

**2001 INTERIM GRAZING PROGRAM  
FOR THE SOUTH FORK LITTLE HUMBOLDT RIVER BASIN  
LITTLE HUMBOLDT ALLOTMENT  
Environmental Assessment  
BLM/EK/PL2001/018**

**I. INTRODUCTION/PURPOSE AND NEED**

A. Introduction

The Elko Resource Management Plan (RMP) established the multiple use goals and objectives which guide management of public lands in the Elko Resource Area. The Rangeland Program Summary (RPS) (1987) further identified specific objectives on an allotment by allotment basis. Because of the high resource values existing within the Little Humboldt Allotment (Allotment), the Elko RMP designated this allotment as an “T” (Improve) category allotment and ranked it first on the current planning efforts in the RPS for management. The objectives are to improve or maintain riparian/wetland resources within the South Fork Little Humboldt River (SFLHR) basin (basin) portion of the Allotment Map 1).

In 1999 and 2000, the BLM Elko Field Office completed riparian monitoring for streams within the basin portion of the Allotment. Two monitoring/evaluation reports, “Summary of Stream and Riparian Conditions of the South Fork Little Humboldt River Drainage and Proposed Changes in Livestock Management 1999” (BLM 2000), and “2000 Monitoring Report, South Fork Little Humboldt River Basin - Little Humboldt Allotment” (BLM 2001), were completed in accordance with 43 CFR 4130.3-3. These reports summarized monitoring data along the SFLHR, Sheep and Secret creeks within the basin, and documented impacts of livestock grazing on riparian vegetation, streambanks, and water temperature.

The BLM completed an Interim Full Force and Effect (FFE) decision after informal section 7 consultation with the U.S. Fish and Wildlife Service (FWS) for the 1999 grazing season. This decision, which required that livestock be removed from the basin by June 30, 2000, was appealed to the Interior Board of Land Appeals (IBLA) and IBLA stayed the decision. BLM then initiated another interim decision for the 2000 grazing season, after formal section 7 consultation with the FWS.

The permittee, Oro Vaca, Inc., appealed the decision to IBLA again, which at first stayed the decision, and then dissolved the stay indicating they lacked jurisdiction to review the merits of matters decided in a biological opinion. Oro Vaca, Inc. then went to U.S. District Court requesting a stay on the decision. On June 30,

2000, the Chief Judge, U.S. District Court requested both parties negotiate a resolution for the balance of the 2000 grazing season. As a result, some livestock remained in the basin into September of last year. BLM solicitors indicated that the District Judge felt the BLM's 2000 grazing decision (June 30<sup>th</sup> offdate) was unnecessarily restrictive (to the permittee) and the BLM should consider a compromise.

The proposed action is a compromise to be implemented through issuance of a FFE decision for the 2001 grazing season. The desired results of the BLM's proposed action in this environmental assessment (July 15 offdate) would be to minimize hot season grazing on riparian/wetland vegetation on streams essential to recovery of the Federally listed Lahontan cutthroat trout (LCT) (*Oncorhynchus clarki henshawi*) and Oro Vaca, Inc., retains spring/early summer livestock grazing within the basin. BLM's proposed action would continue to promote recovery of streams and watershed conditions, although not as well as with a June 30<sup>th</sup> offdate.

A large percentage of basin streams are not in proper function condition (PFC), but most are on private lands. BLM's data indicates that starting July 1, livestock utilization of riparian vegetation, including woody species, increases dramatically. By mid to late July utilization of vegetation and streambank trampling can exceed BLM recommendations to accomplish recovery.

Monitoring of basin pastures after livestock use and at the end of the growing and grazing season would evaluate the effectiveness of the 2001 grazing season and would be utilized in developing the long-term multiple use decision. BLM would monitor stubble height on herbaceous plant species, utilization on woody plant species, and streambank trampling.

#### **B Purpose and Need**

The purpose of the proposed action is to initiate livestock management actions within the basin that would achieve the riparian and wetland Standards and Guidelines for the Northeastern Great Basin Area of Nevada and the multiple use objectives for the basin portion of the Allotment (43 CFR §4180.2 (c)). The proposed action would allow for the continued use of the basin for livestock grazing within two pastures and still achieve riparian and wetlands Standards and Guidelines. Increased protection and enhancement of riparian resources will enhance recovery of LCT, as required by the Endangered Species Act (ESA); move riparian and wetlands toward PFC standards; and help meet Standards and Guidelines for the Northeastern Great Basin Resource Action Council area.

C. Land Use Plan Conformance Statement

The proposed action and no action alternative described below are in conformance with the Elko RMP and are consistent with Federal, State, and local laws, regulations, and plans to the maximum extent possible. The resource management objectives and management decisions were documented in the Elko RMP/Record of Decision (ROD) and more specifically described in the **Rangeland Program Summary (RPS)**. The applicable management objectives, decisions and standard operating procedures from the RMP/ROD include: 1) Livestock Management Objective “Maintain or improve the condition of public rangelands to enhance productivity for all rangeland values,” and Decisions 1, 4, 5, and 6; and 2) Wildlife Management Objective “Conserve and enhance terrestrial, riparian and aquatic wildlife habitat” and Decisions 3 and 6.

II. **PROPOSED ACTION AND ALTERNATIVE**

A. Proposed Action For the 2001 Grazing Season in the South Fork Little Humboldt River Basin

In compliance with section 7 of the ESA and after consultation with the FWS, the BLM’s proposed action is to adopt the Reasonable and Prudent Measures (RPMs) outlined in the 2001 Biological Opinion (BO) (1-5-01-F-033) from the FWS, and implement the management actions identified below:

Reasonable and Prudent Measures

The FWS believes the following RPMs are necessary and appropriate to minimize impacts of incidental take of LCT. Section 9 of the ESA, as amended, prohibits take (harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct) of a listed species of fish and wildlife without special exemption. Harm is further defined to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns such as breeding, feeding, or sheltering. Under the terms of section 7 (b)(4) and 7(o)(2) of the ESA, taking that is incidental to and not intended as part of the agency action is not considered a prohibited taking provided that such taking is in compliance with an incidental take statement.

The FWS expects that livestock grazing within the basin supporting threatened LCT is likely to result in incidental take in the form of kill, harass, and harm directly from livestock wading and indirectly from detrimental effects on hydrology, water temperature, substrate quality, bank stability, food supply, spawning success, and sediment levels. These are habitat qualities that directly affect the biological needs of LCT and the capacity of the habitat to support them. With implementation of the BLM’s proposed action, the FWS has developed two RPMs to minimize the impacts of anticipated take:

1. Minimize utilization of riparian vegetation and streambank trampling by livestock along LCT streams within the basin.
2. Assess compliance with the RPMs, terms and conditions for minimizing utilization of riparian vegetation and streambank trampling (RPM 1), and ensure compliance with reinitiation requirements contained in the BO. If BLM or Oro Vaca does not comply with the terms of the BO, then BLM will need to reinitiate section 7 consultation with the FWS and modify the proposed action.

Terms and Conditions:

In order to be exempt from the prohibitions of section 9 of the ESA, BLM must comply with the following terms and conditions, which implement the RPMs described above and outline required reporting/monitoring requirements. These terms and conditions are non-discretionary.

1) To comply with RPM Number 1, the BLM would implement all actions that minimize the impacts of livestock grazing to LCT as described in the *Description of the Proposed Action* in the BO to include:

a) Issuing a final 2001 interim grazing decision for the basin, effective upon issuance, before turnout into the South Basin pasture. This decision is required because past and existing livestock grazing practices pose imminent likelihood of continued degradation of LCT habitat, thereby jeopardizing the continued existence and survival of LCT within the Humboldt Basin Distinct Population Segment (DPS). The decision would verify that the maximum livestock numbers authorized at any one time within the basin would not exceed six hundred (600) head, including cattle that may be trailing through the basin.

In addition, the decision would limit the season of use of the North Basin pasture to September 15 through October 31, 2001, and the season of use of the South Basin pasture to April 1 through July 15, 2001. Oro Vaca would begin removing livestock from the South Basin pasture on June 30, 2001, so they are completely removed from the entire basin by July 15, 2001. All livestock would be removed from each pasture no later than their respective seasonal end date. Trailing of cattle through the basin (either in or out of other pastures within the Allotment) is restricted to the authorized 2001 season of use and use areas within the basin. Trailed cattle along with permitted cattle within the basin would not exceed 600 head at any one time.

b) Completing necessary project planning and providing Oro Vaca with fencing materials to construct the "Blue" and "Hangnail" fences as soon as possible, but no later than August 1, 2001 9 (See fence description below). BLM would not sign a cooperative agreement with Oro Vaca, Inc. or provide fencing materials for

the construction of the fences until Oro Vaca provides BLM with necessary easements across private lands. Oro Vaca would be responsible for fence construction and maintenance.

c) Ensuring that Oro Vaca completes the installation of the “Blue” and “Hangnail” fences before September 15, 2001. If the installation of these fences has not been completed and inspected by BLM before September 14, 2001, BLM would not authorize Oro Vaca to enter the North Basin pasture on September 15, 2001. Nor would BLM authorize any grazing in the North Basin pasture for the remainder of the grazing year.

The proposed “Blue” fence would divide the basin into two pastures including the South Basin pasture (Approximately 8,802 acres) and the North Basin pasture (Approximately 4,891 acres). The size of the pastures will be determined by the actual location of the “Blue” fence through the survey and design process. Private lands fencing around Oregon Flat (614 acres) is not included in the basin or South Basin pasture acreage (Map 2). The location of the proposed “Blue” fence would be in T40N, R45E, section 35 and T39N, R45E, sections 3, 10, 15 and 16 (Map 2). This 5 mile fence is located on public and private lands and would parallel Sheep Creek on the north in T40N, R45E, section 35 and T39N, R45E, section 3; cross Sheep Creek in section 10; and parallel Sheep Creek on the south side in sections 10, 15, and 16, before tying into the new Jakes Creek boundary fence. The “Hangnail” fence is a ¼ mile public lands fence closing the private Pole Creek pasture fencing project completed by Oro Vaca in 2000 (Map 2). The proposed projects would have the following BLM design features:

- i. The fences would be constructed to BLM specifications for a three strand barbed wire fence with 16½ foot line post spacing. Wire spacing would be 16"-10"-12" from the ground up, with a smooth bottom wire.
- ii. All steel posts would be painted green.
- iii. No blading, grading, or scalping of the fence line or access routes would be allowed. Crushing of the brush with rubber-tired or crawler tractor equipment would be permitted.
- iv. Prior to final inspection, all trash and excess debris would be removed from the public lands and disposed of at a site approved by the contracting officer.
- v. The top wire would be flagged with white cloth or ribbon flagging for the first two years following fence construction.

d) Requiring that Oro Vaca take any and all steps necessary to prevent livestock from utilizing the North Basin pasture during the period April 1 through July 15, 2001 during which they are authorized to utilize the South Basin pasture. If livestock are not confined to the South Basin pasture during this period, BLM would not authorize Oro Vaca's use of the North Basin pasture during the period of September 15 through October 31, 2001.

e) Requiring that all salt blocks be placed on ridges or other areas at least ¼ mile away from springs, streams, troughs, wet or dry meadows, and aspen stands. The salting locations would be changed weekly throughout the authorized use within the basin.

f) Initiating actions to monitor herbaceous stubble height, woody species utilization, and streambank trampling during the 2001 grazing season. Monitoring results would be compared to the following criteria for the purpose of evaluating whether or not the proposed 2001 grazing program impedes the recovery of LCT habitat within the basin:

i) Riparian herbaceous vegetation would be 6 inches at the end of the growing/grazing season. In the spring use pasture herbaceous vegetation should be 6 inches at the end of the growing season, while in the fall use pasture, the herbaceous vegetation should be 6 inches at the end of the grazing season.

ii) Utilization of woody riparian vegetation (aspen and willow) would not exceed 20 percent of current years growth.

iii) Streambank trampling would not exceed 10 percent.

Monitoring would be conducted in the South Basin pasture after July 15, 2001, and at the end of the season (October). The North Basin pasture would be monitored between October 1 and October 31, 2001.

2) To comply with RPM Number 2, the BLM should implement the following requirements:

a) Complete an allotment evaluation, biological assessment, and long-term allotment management plan for the Little Humboldt Allotment in 2001, to be implemented during the 2002 grazing season.

b) In addition, as part of the allotment evaluation process, the BLM would evaluate the monitoring data collected in the 2001 grazing season to determine if



other grazing strategies (e.g., reduction in season of use, reduction in numbers of livestock, extended period of rest, or a combination of all these strategies) would be warranted for the management of LCT within the basin in order to minimize the effects of grazing during the hot season.

#### Conservation Recommendations

Section 7(a)(1) of the ESA directs Federal agencies to utilize their authorities to further the purposes of the ESA by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary agency activities to minimize or avoid adverse effects of a proposed action on listed species or critical habitat, to help implement recovery plans, or to develop information.

1. If BLM's 2001 basin monitoring shows that recovery was impeded by 2001 grazing activities, BLM should consider initiating actions that would provide for extended rest of the basin from livestock grazing.

2. BLM should encourage Oro Vaca to utilize alternative routes other than the basin for trailing cattle to and from Midas to Castle Ridge.

In order for the FWS to be kept informed of actions minimizing or avoiding adverse effects or benefitting listed species or their habitats, the FWS requests notification of the implementation of any conservation recommendations.

#### B. No Action Alternative

The No Action Alternative would authorize grazing at the 2000 use level within the basin. This would provide for a June 30<sup>th</sup> date for livestock removal from the basin as authorized within the 2000 FWS BO (1-5-00-F-078) and BLM interim decision since the 2000 decision was not stayed by the IBLA or District Court actions. The Federal District Court Chief Judge recommended that BLM and Oro Vaca develop a compromise that would authorize grazing beyond June 30 which was the authorized offdate for the 2000 FFE decision. The "Blue" fence would not be constructed in 2001, and no fall grazing would be authorized. The basin would remain a single 13,723 acre pasture. BLM would authorize the completion of the "Hangnail" fence to complete the Pole Creek exclosure/holding area.

### III. AFFECTED ENVIRONMENT

#### A. Proposed Action

##### Description of the Allotment

The Allotment lies in the western portion of Elko County, Nevada, north and west of the town of Midas and includes 67,871 acres of public land and 16,705 acres of private lands. Lower portions of the allotment below the Owyhee Bluffs are

characterized by gently rolling terrain at elevations between 4,570 to 5,700 feet above sea level (asl). The basin portion of the allotment, however, is characterized by more mountainous terrain ranging in elevation from 5,500 to 8,000 feet asl (Map 1).

The basin portion of the Allotment is about 13,723 acres and is bounded on the west by the peaks of the Snowstorm Mountains and the adjacent Jakes Creek Allotment. On the south it is enclosed by the Owyhee Rim and the Owyhee Rim fence. Castle Ridge lies to the northeast of the basin. To the north lies the Bullhead Allotment and lower reaches of the SFLHR from Pole Creek downstream. The basin includes upper reaches of the SFLHR and the following tributary streams: Secret, Sheep, Oregon Flat, and upper Pole creeks. The SFLHR is a tributary to the Little Humboldt River within the greater Humboldt River drainage system.

The following critical elements of the human environment are not present or are not affected by the proposed action or no action alternative in this EA:

Air Quality  
Areas of Critical Environmental Concern  
Environmental Justice  
Farmlands (Prime or Unique)  
Native American Religious Concerns  
Recreation  
Wastes (Hazardous or Solid)  
Wilderness  
Wild and Scenic Rivers

The following critical elements and resources may be affected by the proposed action or no action alternative and are carried forward for analysis:

1. Cultural Resources  
Few surveys or excavations have been conducted in the allotment. The few sites which have been recorded document human use in the region for the past 11,000 years. Because the area has numerous creeks and springs, it is expected that the region would show a relatively high density of prehistoric sites. Construction of the "Blue" fence could adversely effect significant cultural resources through fence construction and increased erosion after the fence is built as cattle concentrate and trail along the fenceline.
2. Floodplains  
Floodplains associated with the South Fork Little Humboldt River and other tributary streams vary depending upon the valley bottom width. Many of these floodplains have been degraded from livestock use. Lack of adequate woody and

herbaceous riparian vegetation has reduced the capacity of the floodplains to stabilize soils, capture sediment, and slow streamflows.

3. Invasive, Nonnative Species

Invasive, nonnative weeds are of major concern on public lands within the administrative boundaries of the Elko Field Office. Weeds typically establish themselves in disturbed and high-traffic areas. Any surface disturbance activity such as road construction and maintenance, farming activities, pipeline trenching, grazing near salt licks and riparian areas, and fence blading can create a potential environment for invasive nonnative species.

No noxious weeds have been identified within the basin in the Elko Field Office Noxious Weed Inventory. The invasive nonnative species cheatgrass (*Bromus tectorum*) is present within the basin, although it is most abundant below the Owyhee Rim at lower elevations. Black henbane (*Hyoscyamus niger*) has been identified within the allotment below the Owyhee Rim.

4. Range/Livestock Grazing

Historically there has been no Allotment Management Plan (AMP) or formal grazing system in effect on the allotment, and the allotment has had few interior fences to control cattle distribution and movement. Oro Vaca, Inc., had a 1996 term grazing permit to run up to 2,426 cattle from 3/16 through 1/31 for a total of 8,278 animal unit months (AUMs) on the Allotment. Cattle were turned out in the Jakes Creek Allotment and moved into the basin part of the Allotment in late May to early June, as melting snow allows access to the basin. They remained in the basin until late September to October, when they are moved to other parts of the Allotment.

The basin represents less than 1/3 of the 67,871 acre Allotment, but has historically been important for summer-long (Late May through October) livestock grazing. The permittee is authorized for up to 1,400 livestock on the Allotment, but BLM has recorded only 542 head within the basin on June 22, 1999, and 225 livestock, not including calves, on July 29, 2000 (Jensen 2000). The permittee has requested authorized use of 800 to 1,000 cattle within the basin during the restricted season of use described for the two pastures in the proposed action. The BO from the FWS recommends no more than 600 livestock be allowed in the basin. Data from 2000 indicate that riparian/wetland criteria used to evaluate the effects of the off-date for the South Basin pasture could be exceeded by 600 cattle by July 15 on drought years. Adjustments in livestock numbers could be necessary to prevent over-utilization of herbaceous and woody species within the riparian/wetland communities and reduce streambank trampling.

During 2000, the BLM constructed the South Rim fence to help control livestock movement, and a west basin Emergency Fire Rehabilitation (EFR) fence is currently under construction as a result of a large fire in the Jakes Creek/Tall Corral Allotments in 2000 (Map 3). In addition, about 4.1 miles of stream on private lands within the basin have been fenced by the permittee. Livestock utilization in these fenced private areas would no longer be authorized by BLM as part of the Allotment grazing plan.

5. Soils

Soils on the allotment range from shallow over rhyolite to deep. They typically have a cobbly loam surface and a cobbly or gravelly clay subsoil. Soils on nearly level areas along the drainages are typically deep, silt loam or clay loam soils, with a high organic matter content.

Soils that have a high surface coarse fragment content are resistant to erosion. Water erosion hazard is greatest on steep soils that have silt loam or clay loam textures. Soil compaction occurs in heavily used areas, especially where there is not much surface gravel or cobble cover, and on fine textured soils when they are moist. Compacted soils have reduced infiltration rates, and greater runoff, thus increasing water erosion. Heavily grazed areas also have less vegetative cover which also increases erosion rates.

Current livestock grazing practices have increased soil erosion, sediment movement in streams, and deposition of gravel and fine materials in slower moving reaches of the stream system. Soil compaction in heavily used areas has reduced water infiltration and accelerated runoff in gullies. Sections of the SFLHR near the confluence of Sheep Creek, and higher elevation intermittent streams have significant downcutting activity, sometimes up to six feet deep.

6. Threatened, Endangered, Candidate and Sensitive Species

Streams within the basin part of the Allotment provide habitat for LCT. The basin part of the allotment contains four LCT streams with approximately 18.5 miles of occupied habitat. These include the South Fork Little Humboldt River (7.6 miles), Secret Creek (4.0 miles), Sheep Creek (5.5 miles), and Pole Creek (1.2 miles). These streams support low to moderate levels of LCT and are located primarily on private lands; however, most of these areas are unfenced and are grazed in conjunction with adjacent lands administered by BLM.

The extent of resource damage documented on these LCT streams led the BLM to propose livestock management changes, starting with the 1999 grazing season, in an effort to prevent the accelerated loss of riparian habitat associated with the streams essential for LCT recovery. LCT in the South Fork Little Humboldt River system are identified as an essential metapopulation in the Recovery Plan for LCT (FWS 2001).

Although no candidate species of plants or animals are known to be present in the Allotment, several Nevada BLM sensitive species have been documented within the Allotment or adjoining areas. These include the golden eagle (*Aquila chrysaetos*), Swainson's hawk (*Buteo swainsoni*), mountain quail (*Oreortyz pictus*) and sage grouse (*Centrocercus urophasianus*).

It is also likely that additional BLM sensitive species including the northern goshawk (*Accipiter gentilis*), ferruginous hawk (*Buteo regalis*), and the burrowing owl (*Speotyto cunicularia*), are present within or near the Allotment. The diverse mixture of rocky cliffs, mountain brush communities, aspen woodlands, meadows, and streamside riparian zones provide important habitat for these species. Less than satisfactory conditions, particularly for aspen stands, willow communities, meadows, and streamside zones, may adversely affect sensitive species, many of which are dependent on riparian habitat.

7. Visual Resources

The basin has Class II, III, and IV visual resources management (VRM) objectives. The Class II objective is to retain the existing character of the landscape. The level of change to the characteristic landscape should be low. Within Class II VRM areas, management activities may be seen, but should not attract the attention of the casual observer. Any changes must repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape.

The Class III objective is to partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Within Class III VRM areas, management activities may attract attention, but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape.

The Class IV objective is to provide for management activities which require major modification of the existing character of the landscape. The level of change to the characteristic landscape can be high. Within Class IV VRM areas, management activities may dominate the view and be the major focus of viewer attention. However, every attempt should be made to minimize the impact of these activities through careful location, minimal disturbance, and by repeating the basic elements.

The general landscape of the basin includes rolling hills and canyons with high mountains to the west with aspen-covered slopes and streambottoms. The streams flow between open canyon areas and rocky gorges. Interior fencing has not been present within the basin until 2000, except along the boundary of the Bullhead Allotment to the north. The landscape ranges from a gray-green color in areas of

sagebrush and grasses in the spring and early summer, to brownish in fall and winter. Some dirt two-track roads are present in the basin as visual scars. These two track roads cross the SFLHR and most tributary streams. Some visual scars are observable as a result of recent fence construction (Map 2). The North Basin pasture area is somewhat lower and has a south exposure with vegetation greening up earlier than the South Basin pasture. As a consequence of its elevation and exposure, the vegetation in the North Basin pasture would also dry up earlier.

8. Water Quality(Surface/Ground)

There are no numeric water quality standards for the South Fork Little Humboldt River or tributary streams. Only the minimum water quality standards established by the Nevada Division of Environmental Protection (NDEP) for undesignated water apply. No water quality monitoring has been done on the South Fork Little Humboldt River by BLM or NDEP, except for water temperature.

No water quality sampling points exist for the SFLHR or tributary streams within the basin, but BLM has determined that summer water temperatures exceed minimum standards for trout streams. The water quality criteria for the State of Nevada for waters inhabited by trout establishes an upper limit of 20°C (68°F). Dunham (1999) recommends that water temperatures for LCT not exceed a daily maximum of 22°C (72°F) to minimize risk of mortality and sublethal stress. Experimental data show LCT begin to synthesize detectable amounts of heat shock proteins immediately at 26°C (79°F) and within 24 hours of chronic exposure to temperatures of 24°C (75°F) (Dickerson and Vinyard 1999).

Water temperatures recorded within the basin in LCT streams in 2000 consistently exceeded these thresholds. Maximum temperatures in excess of 29°C (84°F) to 30°C (86°F) were recorded in the SFLHR between Secret Creek and Pole Creek. Water temperatures in excess of 26°C were recorded almost daily for the SFLHR in July. In addition, water temperatures in excess of daily limit thresholds were sustained for significant periods of hours on a daily basis during the summer of 2000 (BLM 2001).

Thirty years of precipitation data from the Tuscarora Weather Station indicates the median crop year precipitation (September through June) is 9.9 inches with less moisture at lower elevations and more moisture at higher elevations. Most moisture falls as winter snow and spring rains. The data from 1981 through 1995 indicates that 9 of 15 years (60%) had less than average precipitation and three years had around 200 percent or above of average precipitation (1982, 1983, and 1984).

Northeastern Nevada was extremely dry during the 2000 growing season and was characterized as a “moderate drought” (precipitation 3.0 to 3.9 inches below normal) by mid-June. By the first week in July until early October, drought

conditions in northeastern Nevada were characterized as “extreme drought” (precipitation 4.0 or more inches below normal)(NOAA 2000). Drought years also occurred in 1988, 1991, and 1994.

9. Wetlands/Riparian Zones

Wetlands and riparian areas are associated with the many springs and streams within the basin. Woody species and herbaceous vegetation associated with the springs and riparian areas have been historically and presently are heavily impacted by livestock grazing.

Proper Functioning Condition (PFC) assessments completed on 29.8 miles of basin streams indicate 78 percent of the stream reaches are non-functional or functional-at-risk with a downward or static trend. Ratings of non-functional were associated with channel entrenchment, draining of the floodplain, unstable streambanks, excessive sedimentation, lack of riparian vegetation, and lack of woody plant species regeneration due to historic and recent livestock use (BLM 2001). Spring sources have been heavily utilized and trampled and aspen and willow sites have limited or lack of regeneration.

10. Vegetation

Vegetation is diverse and includes plant communities dominated by Wyoming big sagebrush (*Artemisia tridentata wyomingensis*), Sandberg bluegrass (*Poa secunda*), and bottlebrush squirreltail (*Sitanion hystrix*) in the lower elevations and mountain big sagebrush (*Artemisia tridentata vaseyana*), Idaho fescue (*Festuca idahoensis*), and bluebunch wheatgrass (*Agropyron spicatum*) at the higher elevations. Riparian communities support aspen (*Populus tremuloides*), willow (*Salix spp*), and current (*Ribes ssp.*). Kentucky bluegrass (*Poa pratensis*) and sedge species dominate remnant meadow areas near seeps, springs, and as corridors along streams.

11. Wildlife

Big game species present in the basin include mule deer and antelope. A variety of non-game and upland game species also occur in the basin including; sage grouse, chukar, mourning dove, mountain bluebirds, sparrows, hawks, ground squirrels, rabbits and hares, and coyotes. Various other birds, rodents, bats, and reptiles occur in the area.

12. Wild Horses

Wild horses were present within the basin portion of the allotment, although the largest numbers occur outside the basin in the Castle Ridge part of the Allotment. No Appropriate Management Level (AML) has been set for the horse herd associated with the Allotment, but preliminary data suggests an AML of 175 horses would result in a thriving natural ecological balance. Horse numbers were at 312 animals prior to the 1998 foaling season and probably exceed 360 wild

horses at the current time using a 20 percent foaling rate (Kathy McKinstry 1998 Memorandum). Most wild horse use occurs in the northeastern portion of the Allotment near Castle Ridge, Brush Creek, and Castle Spring and northward. Some private land fencing completed by Oro Vaca, Inc. in 2000 restricts wild horse access and use in the basin from the Castle Ridge area. In the Brush Creek and Castle Ridge areas, wild horses are the primary problem species related to stream and spring functionality.

13. Migratory Birds

On January 11, 2001 President Clinton signed the Migratory Bird Executive Order. This executive order outlines the responsibilities of Federal agencies to protect migratory birds. The United States has recognized their ecological and economic value to this country and other countries by ratifying international, bilateral conventions for the conservation of migratory birds. These migratory bird conventions impose substantive obligations on the United States for conservation of migratory birds and their habitats. The United States has implemented these migratory bird conventions through the Migratory Bird Treaty Act. President Clinton's Migratory Bird Executive Order directs executive departments and agencies to take certain actions to further implement the Migratory Bird Treaty Act. As defined in the executive order, "action" means a program, activity, project, official policy (such as a rule or regulation), or formal plan directly carried out by a Federal agency. The executive order further states that each Federal agency taking actions that have, or are likely to have, a measurable negative effect on migratory bird populations is directed to develop and implement, within 2 years, a Memorandum of Understanding (MOU) with the Fish and Wildlife Service that shall promote conservation of migratory bird populations. The term "action" will be further defined in this MOU as it pertains to each Federal agency's own authorities and programs.

A list of the migratory birds affected by the President's executive order is contained in 43 CFR 10.13. References to "species of concern" pertain to those species listed in the periodic report "Migratory Nongame Birds of Management Concern in the United States," priority migratory bird species as documents by established plans (such as Bird Conservation Regions in the North American Bird Conservation Initiative or Partners in Flight physiographic areas), and those species listed in 50 CFR 17.11.

The proposed action is located in aspen, montane riparian, montane shrub, and sagebrush habitat types. The Nevada Partners in Flight Bird Conservation Plan identifies the following bird species associated with each of these ecotypes:



Aspen	Montane Riparian	Montane Shrub	Sagebrush
<u>Obligates:</u> see Monatanne Riparian  <u>Other:</u> Northern Goshawk Calliope Hummingbird Flammulated Owl Lewis's Woodpecker Red-naped Sapsucker Mountain Bluebird Orange-crowned Warbler MacGillivray's Warbler Wilson's Warbler	<u>Obligates:</u> Wilson's Warbler MacGillivray's Warbler  <u>Other:</u> Cooper's Hawk Northern Goshawk Callipe Hummingbird Lewis's Woodpecker Red-Naped Sapsucker Orange-crowned Warbler Virginia's Warbler Yellow-breasted Chat	<u>Obligates:</u> None  <u>Other:</u> Black Rosy Finch Black-throated Gray Warbler Callipe Hummingbird Cooper's Hawk Loggerhead Shrike Blue Grosbeak Vesper Sparrow MacGillivray's Warbler Orange-crowned Warbler Swainson's Hawk Western Bluebird	<u>Obligates:</u> Sage Grouse  <u>Other:</u> Black Rosy Finch Ferruginous Hawk Gray Flycatcher Loggerhead Shrike Vesper Sparrow Prairie Falcon Sage Sparrow Sage Thrasher Swainson's Hawk Burrowing Owl Calliope Hummingbird  <u>Other associated species:</u> Brewer's Sparrow Western Meadowlark Black-throated Sparrow Lark Sparrow Green-tailed Towhee Brewer's Blackbird Horned Lark Lark Sparrow

#### IV. ENVIRONMENTAL CONSEQUENCES

##### A. Proposed Action

The proposed action has been developed in coordination and consultation with the FWS and Oro Vaca, Inc. as an interim grazing plan for 2001 for the basin portion of the Allotment. Formal section 7 consultation with the FWS was completed for the 2001 proposed action (I-5-01-F-033).

##### 1. Cultural Resources

The proposed action should reduce animal hoof damage to cultural resources. Many of these resources are concentrated in wetland/spring sites and along riparian areas which would benefit from reduced livestock use. A Class III cultural inventory would be completed prior to construction of the "Blue" fence, a formal BLM cultural resources report would be written, and filed by the BLM at the Nevada State Historic Preservation Office. All significant sites would be avoided by fence routing.

2. Floodplains

The proposed action would enhance floodplain attributes by reducing livestock utilization during the hot summer use period and allow regeneration and regrowth of herbaceous vegetation and woody plant species in the riparian/wetland communities.

3. Invasive, Nonnative Species

The proposed action should increase the native species component of the riparian/wetland community and reduce the potential for establishment of invasive species on heavily disturbed livestock use sites. New fenceline development and water development activities provide the opportunity for the introduction and spread of noxious weeds and nonnative, invasive species.

4. Range/Livestock Grazing

The proposed action would change how livestock are grazed within the basin portion of the allotment by reducing hot season use, restricting authorized use to 600 livestock, and dividing the basin into two pastures. Livestock grazing would be allowed in the South Basin Pasture (8,802 acres) from April 1 to July 15, depending upon snowmelt and access. In addition, livestock use would be allowed in the North Basin Pasture (4,891 acres) from September 15 through October 31, after completion of the “blue fence” which would divide the basin on an east-west axis. Total allowable grazing use in the basin would be 2,900 AUMs (2,100 AUMs spring use and 800 AUMs fall use) with 600 cattle. The would be approximately 2,600 AUMs less use than is current/historic use levels (5,500 AUM’s) in the basin (Mid May to October 30 with 1,000 cattle).

Upland forage would not be used to limit grazing as much as riparian/wetland utilization criteria. The change in livestock use is needed to improve riparian/wetland habitats to achieve PFC and benefit LCT recovery. The ranch plans on using the Castle Ridge Pasture for cattle between these dates.

5. Soils

Soils would benefit by the proposed action by reducing the season of use, and allowing less use on woody species. This would provide better root masses and surface cover to hold soil in place, thus reducing runoff, and wind and water erosion. There would be less soil compaction in the riparian areas during the hot season, because cattle would be removed by July 15.

The proposed action would have short-term benefits to streambank soil resources by reducing soil movement and rebuilding streambanks through riparian plant species rest and restoration.

6. Threatened, Endangered, Candidate and Sensitive Species

The proposed action would benefit LCT by reducing livestock use along riparian areas on unfenced co-mingled public and private lands. Habitat monitoring indicates habitat conditions have deteriorated over the long-term with historic hot season grazing use.

The proposed action would benefit both nesting and brood rearing aspects of sage grouse life history. Improved conditions along riparian areas would benefit sage grouse cover and feeding opportunities. The proposed action would provide opportunity for riparian plant communities to begin reestablishment and attainment of their full potential. New fences could create flight hazards for sage grouse, but flagging for the first two years should assist birds in avoiding the fence.

7. Visual Resources

Visual resources would be changed by the proposed action with the addition of new fences on both public and private lands on what historically was an unfenced basin. Some visual scars would be observable because of fence construction and as livestock trail along the fence. The proposed action would enhance visual resources within the riparian/wetland communities by retaining vegetation sufficient to improve appearances of these communities

8. Water Quality(Surface/Ground)

The proposed action would not immediately change water temperature problems, but would initiate actions which would have a long-term influence on reducing water temperatures and sedimentation and by rebuilding streambanks.

9. Wetlands/Riparian Zones

The proposed action would reduce livestock utilization during the hot season and allow for regrowth of riparian plant species during most years. The proposed action would allow for grazing of herbaceous riparian plants and woody species for an additional two weeks beyond that proposed in the no action alternative. The impacts of the proposed action on wetland/riparian species would be greater during extreme drought years such as 2000. Aspen and willow regeneration would benefit from the proposed action during most years, although benefits could be less in the North Basin Pasture on dry, warm fall years when livestock utilize wetland and riparian aspen areas for shade and feeding.

10. Vegetation

The proposed action would have a positive influence on most plant communities by reducing hot season grazing, allowing for seed development, and reducing utilization on plants from summer-long to six weeks in early summer or fall months depending upon pasture.

11. Wildlife

The proposed action would result in more residual vegetation within the basin for wildlife species and could contribute to better nesting and brood rearing habitat for most species, particularly riparian obligate species. Construction of the “Blue” fence could create potential barriers to big game movements. However, construction of a 3-wire fence with spacing of 16-10-12 inches, a smooth bottom wire, and making the fence more visible during the first two years will significantly reduce any adverse impacts.

12. Wild Horses

The proposed action should have limited effect on wild horses, since private lands fencing in 2000 excluded horses from the basin. Increased livestock use in 2001 in the Castle Ridge Pasture could effect wild horses because of increased competition for food and water resources.

13. Migratory Birds

The proposed action could provide some benefit for nesting and feeding within the basin because of residual vegetation and regrowth in riparian and wetland areas after livestock are removed. Some livestock utilization on woody species would occur, especially during the period from July 1 through July 15, but woody species should improve providing habitat for songbirds and other riparian obligate species.

The proposed action would reduce hot season grazing use within the basin portion of the Allotment, and would allow for the restoration of degraded riparian habitats and regeneration of woody species. This action would improve nesting, brood rearing, and feeding habitats for migratory birds and is consistent with the conservation measures listed in Section 3 (e) of the President’s Migratory Bird Executive Order, specifically:

1) support the conservation intent of the migratory bird conventions by integrating bird conservation principles, measures, and practices into agency activities and by avoiding or minimizing, to the extent practicable, adverse impacts on migratory bird resources when conducting agency actions;

2) restore and enhance the habitat of migratory birds, as practicable;

5) within established authorities and in conjunction with the adoption, amendment, or revision of agency management plans and guidance, ensure that agency plans and actions promote programs and recommendations of comprehensive migratory bird planning efforts such as Partners-in-Flight....

6) ensure that environmental analyses of Federal actions required by the NEPA or other established environmental review processes evaluate the effects of actions and agency plans on migratory birds, with emphasis on species of concern.

B. No Action Alternative

The no action alternative would be the 2000 interim grazing plan for the basin with a June 30<sup>th</sup> offdate, which was not complied with because of court hearings and appeals. It reflects more stringent grazing use and BLM Solicitors indicated that the Federal District Judge considered this proposal overly restrictive. The no action alternative, however, would have more closely met the BLM/FWS criteria guidelines recommended for vegetative conditions within the basin.

1. Cultural Resources

Cultural resources would benefit from the BLM's no action alternative because livestock would be removed from the basin by June 30<sup>th</sup>, significantly reducing livestock impacts to riparian areas where cultural resources are most likely to occur. This would reduce livestock trampling effects on cultural resources. The "Blue" fence would not be authorized, thereby causing less ground disturbance.

2. Floodplains

Proposed management activities under the no action alternative would enhance floodplain values, improve riparian vegetative condition, and streambank water storage more rapidly than the proposed action because the early livestock removal date would minimize grazing/browsing on riparian/wetland vegetation and allow regrowth to occur sooner.

3. Invasive, Nonnative Species

The no action alternative would reduce the potential spread of invasive, nonnative species because of early removal of livestock by June 30<sup>th</sup> leaving more residual native vegetation in the basin.

4. Range/Livestock Grazing

The no action alternative would change how livestock are grazed within the basin portion of the allotment by eliminating hot season use. Livestock grazing would be allowed in the basin from May to June 30, depending upon snowmelt and access. This grazing schedule would reduce total livestock grazing use within the basin. The basin would remain as a single 13,723 acre pasture with two fenced private segments (Oregon Flat and Pole Creek) which the ranch would manage independent of the BLM grazing permit. There would be no fall grazing use within the basin under the no action alternative. Total livestock use within the basin would be about 2,000 AUMs (1,000 cattle for 2 months). This would be 3,500 AUMs less than historic use levels of 5,500 AUMs (1,000 cattle for 5½ months).

5. Soils

The no action alternative would benefit to soil resources by reducing soil movement within the system better than the proposed action because the June 30 offdate would reduce riparian/wetland vegetation damage and streambank

trampling even during drought years.

6. Threatened, Endangered, Candidate and Sensitive Species

The no action alternative would benefit LCT by reducing livestock use along riparian areas, consequently allowing residual vegetation to thrive on streambanks and riparian areas. This would accelerate the re-establishment of proper functioning conditions. Limited benefits would occur from only one year of this grazing program, although longer term grazing management under this alternative would provide more benefits.

The no action alternative would benefit both nesting and brood rearing aspects of sage grouse life history. Improved conditions along riparian areas would benefit sage grouse cover and feeding opportunities. By not constructing the “Blue” fence, potential flight hazards with sage grouse would be eliminated.

The no action alternative could benefit potential candidate species present in the allotment, but most benefits would occur over a longer period of time. Remnant vegetation would benefit candidate species in the spring/summer of 2002.

7. Visual Resources

Visual resources would not be changed by the no action from what currently exists, except more vegetation would be present within the basin in the uplands and along the riparian areas after the June 30<sup>th</sup> livestock removal date. A ¼ mile segment of BLM fence would be completed on the Pole Creek enclosure/holding area.

8. Water Quality (Surface/Ground)

Water quality would start to improve under the no action alternative as vegetation growth along the edge of the stream captures sediments and rebuild streambanks. This would reduce seasonally high water temperatures as the stream deepens and narrows, and riparian vegetation is re-established. These benefits would start in 2001 but they would be most observable in the 2002 and after, depending upon the grazing system adopted in the multiple use decision.

9. Wetlands/Riparian Zones

The no action alternative would reduce livestock utilization for the year 2001 on the plant communities associated with riparian/wetland areas. Livestock use along the riparian areas increases significantly after July 1 on basin streams, and consequently impacts on woody and herbaceous riparian species increases rapidly. The no action alternative removes this hot season livestock grazing on the riparian plant community.

10. Vegetation

The no action alternative would have a positive effect on all vegetative communities by eliminating hot season grazing within the entire basin. Livestock

use would not be authorized in the basin after June 30. This would reduce utilization on herbaceous and woody plant species, allow a longer period of regrowth in riparian/wetland areas, and provide a better opportunity for plant species to regenerate.

11. Wildlife

The no action alternative would leave more residual vegetation within the basin for wildlife species and could contribute to better nesting, brood rearing and foraging habitat for some species.

12. Wild Horses

The no action alternative could effect wild horses if livestock are moved to the Castle Ridge pasture after June 30<sup>th</sup> where wild horse numbers are high. Livestock and wild horses would compete for food and water during the hot summer months. The no action and proposed action would have similar impacts to the Castle Ridge pasture until water improvements are completed in the future and horse numbers are reduced to AML.

13. Migratory Birds

The no action alternative would provide benefit for nesting and feeding within the basin because of additional residual native vegetation and regrowth after livestock are removed.

C. Cumulative Impacts

Past and existing uses and disturbances in the general area include: livestock grazing, recreation, wildfires, and wild horse use. Some of these uses have resulted in long-term changes to the environment that are not likely to be incrementally changed by the proposed action or alternative in any major way during one year.

Cumulative impacts from the proposed action on resources analyzed in Chapter IV are anticipated to be beneficial in terms of soil, wildlife, vegetation, water quality, floodplain, threatened, endangered, candidate, and sensitive species habitat, water resources, and wetland/riparian. Minor negative impacts to visual resources could be expected as a result of fence construction as part of the proposed action. However, this minor visual impact would be somewhat offset by the improvement in native riparian/wetland vegetation regrowth.

#### IV. CONSULTATION AND COORDINATION

##### A. List of Preparers

Patrick Coffin - Preparer, Fisheries Biologist  
Marlene Braun - NEPA Coordinator  
Steve Dondero - Outdoor Recreation Planner, Recreation, Wilderness, Visual Resources.  
Ray Lister - Wildlife Biologist, Threatened and Endangered Species, and Migratory Birds  
Kathy McKinstry - Wild Horses and Burro Specialist, Wild horses  
Carol Marchio - Hydrologist , Air Quality, Floodplains, Water Quality (Surface/Ground), and Soils.  
Bryan Hockett - Archeologist, Cultural Resources, Native American Religious Concerns.  
Mark Coca - Natural Resources Specialist, Invasive, Nonnative Species

##### B. Persons, Agencies, or Groups Consulted

Oro Vaca Ranches, Inc.  
Nevada First Corporation  
Schroeder & Lezamiz  
Bottari & Associates Realty  
Elko County Conservation Association  
Wild Horse Organized Assistance  
Friends of Nevada Wilderness  
Barrick Goldstrike Mine, Inc.  
Nevada Division of Wildlife  
Nevada Division of Agriculture  
HTT Resource Advisors  
Commission for the Preservation of Wild Horses  
Nevada Cattlemen's Association & Land Action Association  
Resource Concepts, Inc.  
Nevada State Clearinghouse  
Ellison Ranching Company  
Kenneth Buckingham  
Federal Land Bank of Sacramento  
Elko County Commissioners  
U.S. Fish and Wildlife Service  
Marvel & Kump, LTD.  
LandFinders Country Properties  
Intermountain Range Consultants  
Sierra Club  
Northeastern Nevada Trout Unlimited  
Committee for Idaho's High Desert  
Idaho Watersheds Project



Phyllis Jo Dean  
Trout Unlimited, California Policy Office  
Katie Fite, Committee for Idaho's High Desert

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National Atmospheric and Oceanic Administration (NOAA). 2000. Palmer Drought Index. Climatic Prediction Center, National Weather Service, Web Team Publication Center (CPC), World Weather Building, Camp Springs, MD.

D. MAPS

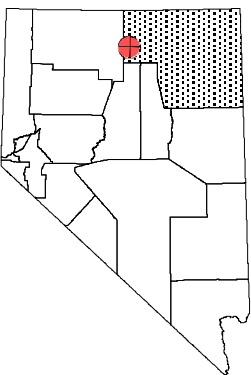
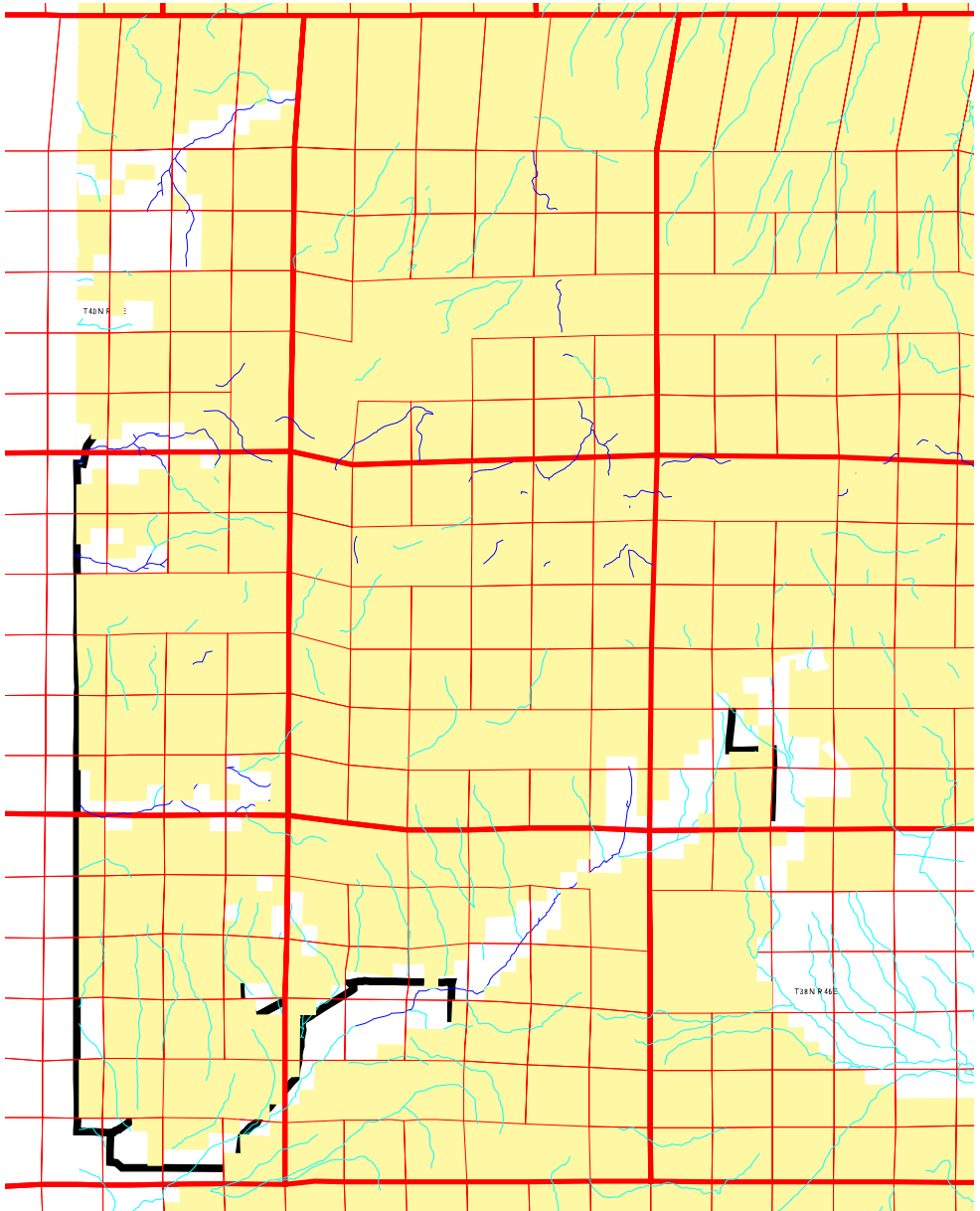
Map 1 - South Fork Little Humboldt River Management Basin, Little Humboldt Allotment.

Map 2 - Little Humboldt Allotment, South Fork Little Humboldt River Basin PFC, Topography, Existing and Proposed Fences, and Roads.








Map 3 - Kelly Creek fire fences and seeding treatment.

# South Fork Little Humboldt Management Basin

Map 1



## Legend

-  South Fork Little Humboldt Management Basin
- Streams**
  -  intermittent
  -  perennial
-  Allotment Boundary
-  Square Mile Sections
- Land-Ownership Status**
  -  Public (Administered by BLM)
  -  Private

1 0 1 2 3 4 5 Miles




Scale 1:200,000

